

Fauna Sumatrensis.

(Beitrag Nr. 64).

Carabidae (Col.).

By

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For some years past Mr. EDW. JACOBSON has sent me occasional consignments of **CARABIDAE** collected almost entirely by himself in the Residency of Sumatra's West Coast, and mainly at Fort de Kock. The specimens from Air Bangis were taken by Mr. W. VAN HEURN, and those from Ampugadang by Mr. A. DE KOCK.

In this paper all the species in the collection (except two or three unique Harpalids) have been enumerated, including those recently described by me in Ann. Mag. Nat. Hist. (9), XVIII, 1926, pp. 273—90. The descriptions of the new species, which number twenty-two, with one variety, have been placed at the end of the list, and all the types have been presented by Mr. JACOBSON to the British Museum. In the case of each of the four genera *Perigona*, *Dolichoctis*, *Caelostomus*, and *Lebia* three new species are described, but of the two last genera only one other species is in each case known from the island; in the two first however, the species are more numerous, and following the descriptions, a key has been inserted for all those of each genus known from Sumatra ¹⁾.

In the list the name of the genus under which the original description appeared has for convenience been added in a parenthesis after the generic name; only original references are given, but after each species will be found some notes on the distribution. The expression "South East Asia" must be understood to include both India and the Malay

¹⁾ The publication of the key to the species of *Dolichoctis* has been deferred, as further new species are being described elsewhere.

Archipelago, but Japan and New Guinea are, where necessary, mentioned by name.

The elevations (in metres) of the various localities are as follows :

Padang	2 M.	Padang Aarap . . .	700 M.
Air Bangis	10 M.	Fort de Kock . . .	920 M.
Ampugadang	120 M.	Tandjungadang	
Lubuksikaping	450 M.		1000—1200 M.
Aneikloof	500 M.	Gunung Singgalang	1800 M.

OZAENINI.

1. *Pseudozaena (Ozaena) orientalis* KLUG. Jahrb. Ins. 1834, p. 81, t. 1. f. 8. Fort de Kock.
Fairly common in the larger Sunda Islands.
2. *Dhanya seminigra* sp. nov. (see p. 315).
3. *Dhanya seminigra* v. *pallidula* var. nov. (see p. 316).

SCARITINI.

4. *Clivina memnonia* DEJ. Spec. Gen. V. 1831, p. 503.
Fort de Kock.
Very common in India and Indo-China, but found also occasionally in the Malay Peninsula and Archipelago.
5. *Clivina castanea* WESTW. Proc. Zool. Soc. 1837, p. 128.
Fort de Kock ; Padang.

Common through the whole oriental region, including Japan and New Guinea.

6. *Clivina costulipennis* BATES Ann. Mus. Civ. Gen. XXXII, 1892, p. 281. Gunung Singgalang.

This species has a curious distribution, being confined to a narrow strip of territory running North and South from Assam, through Burma and the Malay Peninsula, to Sumatra. I have no record from any other Malay island.

7. *Clivina truncata* PUTZ. Compt. rend. Soc. Ent. Belg. 1877, p. 45. Fort de Kock.

PUTZEYS described the species from Amboina, and the only other specimens I can remember seeing are those now recorded, and some examples from the Mentawai Is. in the collection of the Genoa Civic Museum.

8. *Clivina extensicollis* PUTZ. Mém. Liége XVII, 1863, p. 601.
Gunung Singgalang.

The type came from Java, but, as I have recorded elsewhere (Ann. Mag. Nat. Hist. (9), XVII, 1926, pp. 375 and 376), its whereabouts is uncertain. In the Malay region I have seen examples from Borneo, Sumatra, and Lombok. In the Brussels Museum there are two examples labelled "Calcutta", and quite recently a specimen has come to hand from the neighbourhood of Dehra Dun in North India, so that the area of distribution of this apparently rare species must be a wide one.

HEXAGONIINI.

9. *Hexagonia nigrata* VAN DE POLL, Notes Leyd. Mus. 1889, p. 247. Fort de Kock.

A fairly common insect through Burma, the Malay region, and Indo-China; it has also been recorded by Commandant DUPUIS from Formosa.

10. *Hexagonia bouchardi* PLIDE Insecta IV, 1914, p. 164, ff. 1—3. Fort de Kock.

Confined, so far as I am aware, to the islands of Java and Sumatra.

11. *Hexagonia virens* sp. nov. (see p. 317).

PTEROSTICHINI.

12. *Brachidius crassicornis* CHAUD. Bull. Mosc. 1852. I, p. 80.
Fort de Kock; Gunung Singgalang.

One of Mr. JACOBSON's specimens was taken under the rotten bark of *Erythrina lithosperma* MIQ. The species does not occur in India, but is common in Burma, Indo-China, and throughout the whole of the Malay Archipelago.

13. *Caelostomus picipes* MACL. Ann. Jav. 1825, p. 24.
Fort de Kock; Gunung Singgalang.

Very common throughout South East Asia, and extending southwards to Australia, but represented in Japan by another, though very closely allied species.

14. *Caelostomus sumatrensis* sp. nov. (see p. 318).

15. *Caelostomus iridescens* sp. nov. (see p. 319).
 16. *Caelostomus singularis* sp. nov. (see p. 320).
 17. *Diceromerus (Stomonaxus) orientalis* MOTCH. Etud. Ent. 1859, p. 35. Fort de Kock.

Widely distributed throughout South East Asia.

18. *Cosmodiscus (Stomonaxus) platynotus* BATES. Trans. Ent. Soc. Lond. 1873, p. 283. Fort de Kock.

This is another species with an unusual distribution. Originally described from a single specimen taken by Mr. GEORGE LEWIS in Japan, examples have since been found in Sikkim, the Palni Hills (South India), Burma, Sumatra, and Java.

19. *Morion (Morio) orientale* DEJ. Spec. Gen. I, 1825, p. 432. Lubuksikaping.

Very common throughout South East Asia.

20. *Lesticus jacobsoni* sp. nov. (see p. 321).
 21. *Abacetus indrapoërae* TCHITCH. Hor. Soc. Ent. Ross. XXXVI, 1903, p. 56. Fort de Kock; Padang.

I have not seen the type of this species, but believe it to be in the Museum of the Academy of Sciences at Petrograd. The identification was therefore made from the description only. The species appears to be confined to Java and Sumatra.

BEMBIDIINI.

22. *Tachys (Trechus) fasciatus* MOTCH. Bull. Mosc. 1851, II, p. 506. Fort de Kock; Gunung Singgalang; Padang.

This very common species, known till quite recently under the name of *T. triangularis* NIETN., occurs throughout Southern Asia, including Japan, and extends southwards to Queensland and New Caledonia; westwards it ranges through Arabia to Egypt, and is found also in Cape Colony.

23. *Tachys (Bembidium) truncatus* NIETN. Ann. Mag. Nat. Hist. (3), II, 1858, p. 421. Fort de Kock.

A widely distributed, though not very common species.

24. *Tachys (Bembidium) klugi* NIETN. Ann. Mag. Nat. Hist. (3), II, 1858, p. 423. Fort de Kock.

Another common, widely distributed species.

25. *Tachys florus* ANDR. Ann. Mus. Civ. Gen. LI, 1925, pp. 402 and 426. Fort de Kock; Padang.
Uncommon and known only from Singapore and Sumatra.
26. *Tachys (Bembidium) ceylanicus* NIETN. Ann. Mag. Nat. Hist. (3), II, 1858, p. 423. Fort de Kock; Padang.
A common species throughout South Eastern Asia.
27. *Tachys poecilopterus* BATES. Trans. Ent. Soc. Lond. 1873, p. 331. Padang.
Originally found in Fuchau, which appears to be the northern limit. It is a very common species throughout South East Asia.
28. *Tachys politus* MOTCH. Bull. Mosc. 1851. II, p. 509. Padang.
One of the commonest and most widely distributed species in South East Asia.
29. *Tachys fumigatus* MOTCH. Bull. Mosc. 1851. II, p. 509. Fort de Kock; Gunung Singgalang; Padang.
Almost as common a species as the last, and even more widely distributed, for it is found as far north as Japan, and as far west as Egypt (var. *socius* SCHAUUM).
30. *Tachys saundersi* ANDR. Ann. Mus. Civ. Gen. LI. 1925, pp. 472 and 482. Gunung Singgalang.
Penang, Singapore, and Sumatra, but varietal forms have been met with both in Java and Sikkim.
31. *Tachys umbrosus* MOTCH. Bull. Mosc. 1851. II, p. 507. Tandjunggadang, 1000—1200 M.
Widely distributed in South East Asia.
32. *Tachys coracinus* PUTZ. Ann. Mus. Civ. Gen. VII. 1875, p. 739. Gunung Singgalang.
Assam, Burma, Siam, Indo-China, and the Malay region; the species is not a very common one.

HARPALINI.

33. *Anisodactylus sjöstedti* ANDR. Ann. Mag. Nat. Hist. (9). XVIII, 1926, p. 276. Fort de Kock.
Examples of this species have also been met with in the Philippine Is.

34. *Gnathaphanus (Harpalus) punctulabris* MACL. Ann. Jav. 1825, p. 20. Fort de Kock.

Extremely common throughout South Eastern Asia and the Malay Islands, but not extending to Japan.

35. *Gnathaphanus vulneripennis* MACL. Ann. Jav. 1825, p. 20. Fort de Kock.

The distribution is similar to that of the preceding species, but it is not nearly so common.

36. *Gnathaphanus (Amara) subolivaceus* MACL. Ann. Jav. 1825, p. 21. Fort de Kock.

Confined, so far as I am aware, to Java and Sumatra.

37. *Gnathaphanus (Harpalus) impressipennis* CAST. Trans. Roy. Soc. Vict. VIII, 1868, p. 186. Fort de Kock.

This species has not yet been met with in India or Burma, but it has been found in the Malay States at Kuala Lumpur and Singapore, and occurs also in the islands of the Malay Archipelago, New Guinea, New Caledonia, and in Australia. I have also lately recorded its occurrence in Samoa, so probably it will be met with in other Polynesian islands.

38. *Dioryche torta* MACL. Ann. Jav. 1825, p. 21.

Fort de Kock.

Common through South East Asia as far east as Formosa and the Philippine Islands; southwards I have seen examples from the larger Malay islands only.

39. *Dioryche (Platymetopus) cavernosa* PUTZ. Ann. Mus. Civ. Gen. VII, 1875, p. 737. Padang.

A Malay species, of which I have seen specimens from Java, Sumatra, and Celebes.

40. *Hyphaercon lautulus* sp. nov. (see p. 322).

41. *Trichotichnus sumatrensis* ANDR. Ann. Mag. Nat. Hist. (9), XVIII, 1926, p. 279. Fort de Kock;

Gunung Singgalang.

Confined to Sumatra and represented by a closely allied species in Java.

42. *Anoplogenus incisus* ANDR. Ann. Mag. Nat. Hist. (9), XVIII, 1926, p. 279. Fort de Kock.

Sumatra, Nias I, Java, Lombok, Celebes, and New Guinea.

43. *Stenolophus (Carabus) smaragdulus* F. Suppl. Ent. Syst. 1798, p. 60.

Var. (*Badister*) *quincupustulatus* WIED. Zool. Mag. II, 1, 1823, p. 58.

This is probably the commonest, as it is the most variable, of South East Asian Carabidae. I do not remember seeing any examples of the typical *bimaculata* form among the numerous specimens taken by Mr. JACOBSON, but all sorts of varieties were met with, from the immaculate to the fully 5-maculate type.

44. *Stenolophus (Harpalus) dingo* CAST. Trans. Roy. Soc. Vict. VIII, 1868, p. 197.

This species differs little from unspotted varieties of the previous one, except in the finely and clearly incised elytral striae. The type is unfortunately lost.

Fort de Kock; Padang.

PERIGONINI.

45. *Perigona (Bembidium) nigriceps* DEJ. Spec. Gen. v. 1831, p. 44. Fort de Kock.

46. *Do* Var. *beccarii* PUTZ. Ann. Mus. Civ. Gen. VII, 1875, p. 732. Fort de Kock.

One of the few cosmopolitan species among the Carabidae.

47. *Perigona plagiata* PUTZ. Ann. Mus. Civ. Gen. VII, 1875, p. 734. Fort de Kock.

The species occurs throughout South Eastern Asia, including both Japan and New Guinea, but is not nearly so common as the preceding one.

48. *Perigona lata* sp. nov. (see p. 323).
 49. *Perigona parvicollis* sp. nov. (see p. 324).
 50. *Perigona jacobsoni* sp. nov. (see p. 325).
 51. *Perigona erythroma* sp. nov. (see p. 326).

ANCHOMENINI.

52. *Lorostema subnitens* sp. nov. (see p. 328).
 53. *Colpodes buehanani* Hope in GRAY's Zool. Misc. 1831, p. 21.

Fort de Kock.

Throughout South Eastern Asia, including South

China, Japan, and the Philippine Is, but in the Malay group of islands I have seen specimens from Java and Sumatra only.

54. *Colpodes purpurascens* sp. nov. (see p. 329).
55. *Colpodes chalcociton* sp. nov. (see p. 330).
56. *Dicranoncus (Menera) quadridens* MOTCH. Etud. Ent. 1859, p. 32. Tandjunggadang, 1000 M.

This species, known until recently under the name of *D. amabilis* CHAUD., is common throughout South East Asia, including the Malay Archipelago and the Philippine Is., but excluding Japan. A variety with dark legs was met with at Fort de Kock, Anei Kloof, and Tandjunggadang, 1200 M.

57. *Arhytiuus bembidioides* BATES. Ann. Soc. Ent. Fr. 1889, p. 279. Fort de Kock. Sikkim, Burma, Annam, Perak, and Sumatra.

ODACANTHINI.

58. *Odacantha (Casnonia) fuscipennis* CHAUD. Bull. Mosc. 1850. I, p. 26. Fort de Kock.

CHAUDOIR, though somewhat doubtfully, gives Chusan as the locality from which his specimen came. The examples on which BATES described his *O. flavicauda*, which I believe to be identical with CHAUOIR's species, were found in Japan and at Fuchau. FAIRMAIRE records the species from Tonkin, and Dr. GESTRO mentions examples in the Genoa Civic Museum from Celebes, Siam, and Malacca. I have examined specimens from China, Cochinchina, and Formosa.

59. *Ophionea interstitialis* SCHM. GOEB. Faun. Col. Birm. 1846, p. 20. Fort de Kock, Anei Kloof.
60. *Ophionea nigrofasciata* SCHM. GOEB. Faun. Col. Birm. 1846, p. 21. Fort de Kock; Tandjunggadang.

Both species are found all through South East Asia, excluding Japan.

BRACHININI.

61. *Pheropsophus (Aptinus) occipitalis* MACL. Ann. Jav. 1825, p. 28. Fort de Kock. Very common in many parts of India, Burma, and in

all the Malay region. I have seen a few examples from Southern China and Formosa, but none from Indo-China.

62. *Pheropsophus (Brachinus) javanus* DEJ. Spec. Gen. I, 1825, p. 305. Fort de Kock; Ampugadang; Padang.

The manifold forms of this common species are found almost throughout South East Asia, but in India I have seen one or two examples only from Orissa and Assam.

LICININI.

63. *Badister sundaicus* ANDR. Ann. Mag. Nat. Hist. (9), XVIII, 1926, p. 275. Fort de Kock.

Confined to Java and Sumatra.

64. *Diplocheila (Rhembus) laevis* LESNE. Bull. Mus. Paris. II, 1896, p. 243, fig. 6. Fort de Kock.

Burma, Andaman Is., Siam, Indo-China, Malay States, and the larger Sunda Islands. An example in the British Museum is labelled "Ceylon".

PANAGAEINI.

65. *Microscopus (Isotarsus) flavopilosus* LAF. Ann. Soc. Ent. Fr. 1851, p. 222. Fort de Kock.

India (including the Laccadive Is., but excluding Ceylon), Japan, Formosa, Fokien, Tonkin, and Sumatra.

66. *Peronomerus fumatus* SCHAUM. Ann. Soc. Ent. Fr. 1853, p. 440. Fort de Kock.

Japan, Southern China, Philippine Is., and Sumatra. The type of *P. aërat* CHAUD., a synonym of *fumatus*, was said to come from the Deccan (probably meaning Dacca), but I think this provenance very unlikely.

CHLAENIINI.

67. *Chlaenius bioculatus* CHAUD. Bull. Mosc. 1856. II, p. 198. Fort de Kock.

Fairly common and widely spread in South East Asia and extending to Japan. Among the Malay islands I have seen examples only from Borneo and Sumatra.

68. *Chlaenius bimaculatus* DEJ. Spec. Gen. II. 1826, p. 301. Fort de Kock; Gunung Singgalang.

A very common and very variable species, found throughout South East Asia, but not extending to Japan.

69. *Chlaenius hamifer* CHAUD. Bull. Mosc. 1856. II, p. 209.
Fort de Kock.

Quite as common as the last species and even more widely distributed, for it occurs in Japan, and extends southwards as far as Queensland.

70. *Chlaenius macleayi* ANDR. Trans. Ent. Soc. Lond. 1919, p. 139.
Fort de Kock.
Malay Peninsula, Borneo, and Sumatra.

71. *Chlaenius flavofemoratus* CAST. Etud. Ent. 1834, p. 81, t. I. f. 3.
Fort de Kock.

Burma, Indo-China, Southern China, Java, Sumatra.

72. *Chlaenius acroxanthus* CHAUD. Ann. Mus. Civ. Gen. VIII. 1876, p. 112.
Fort de Kock.

Siam, Malay States, Borneo, Java, Sumatra.

73. *Chlaenius circumdatus* BRULLÉ Silb. Rev. Ent. III. 1835, p. 283.
Fort de Kock; Air Bangis; Padang.

Widely spread over South East Asia, and extending northwards to Southern China, but not to Japan.

74. *Chlaenius nigricans* WIED. Germ. Mag. IV. 1821, p. 110.
Fort de Kock.

Distribution similar to that of the preceding species, but extending to Japan.

75. *Chlaenius abjectus* ANDR. Ann. Soc. Ent. Belg. 1920, p. 23.
Fort de Kock.

Apparently confined to Sumatra

76. *Chlaenius jacobsoni* ANDR. Ann. Mag. Nat. Hist. (9). XVIII, 1926, p. 274.
Fort de Kock.

Also confined to Sumatra.

77. *Chlaenius guttula* CHAUD. Bull. Mosc. 1856. II, p. 216.
Fort de Kock.

This seems to be a rare species, but it occurs in widely separated localities. I have seen examples from Hongkong, Philippine Is., Timor, and Sumatra.

LEBIINI.

78. *Serrimargo (Thyreopterus) guttiger* SCHAU. Berl. Ent. Zeitschr. 1860, p. 189, t. 3. f. 5.
Air Bangis.

Malay States, Sumatra, Borneo; nearly all the specimens I have seen came from Borneo.

79. *Peripristus (Thyreopterus) ater* CAST. Etud. Ent. 1835, p. 149. Air Bangis; Lubuksikaping.

Throughout Burma, Indo-China, and the Malay region, and evidently common in many localities. Rare in India, my only records being Assam, Sikkim, Nilgiri and Anaimalai Hills, and Cochin State.

80. *Holcoderus auripennis* CHAUD. Bull. Mosc. 1877. I, p. 198. Tandjunggadang.

The only two examples I have seen are the type, which came from Penang, and Mr. JACOBSON's specimen.

81. *Holcoderus (Catascopus) gracilis* Oberth. Notes Leyd. Mus. 1883, p. 220. Fort de Kock.

The typical form is deep blue in colour, but Mr. JACOBSON's examples are greenish. The species has also been met with in the Malay States, but I know of no other localities.

82. *Pericalus funestus* ANDR. Ann. Mag. Nat. Hist. (9). XVIII. 1926, p. 284. Gunung Singgalang.

The specimens taken by Mr. JACOBSON are at present the only ones known.

83. *Pericalus guttatus* CHEVR. Mag. Zool. 1832, cl. IX, t. 46. Var. *violaceus* ANDR. Ann. Mag. Nat. Hist. (9). XVIII. 1926, p. 284. Fort de Kock.

Found also in the Malay States. Mr. JACOBSON's examples were taken under rotten bark of *Erythrina lithosperma* MIQ.

84. *Coptodera flexuosa* SCHM. GOEB. Faun. Col. Birm. 1846, p. 55. Fort de Kock.

Very common in South East Asia, and extending to Formosa, but not to Japan. In India I have seen examples only from the Himalayan tract and the Nilgiri Hills.

85. *Mochtherus (Dromius) tetraspilotus* MACL. Ann. Jav. 1825, p. 25. Fort de Kock.

Extremely common throughout South East Asia, except Japan, and found in India under bark. I have recently seen examples from Samoa, but none seem

yet to have been found between the Malay region and the Samoan Islands.

86. *Dolichoctis lunigera* ANDR. Ann. Mag. Nat. Hist. (9). XVIII. 1926, p. 288. Gunung Singgalang.

Confined to the island of Sumatra.

87. *Dolichoctis jacobsoni* sp. nov. (see p. 331).
 88. *Dolichoctis lis* sp. nov. (see p. 332).
 89. *Dolichoctis quadratipennis* sp. nov. (see p. 333).
 90. *Celaenephes parallelus* SCHM. GOEB. Faun. Col. Birm. 1846, p. 78, t. 2. f. 5. Fort de Kock.

Common in South East Asia and extending through Australasia as far as Samoa. Examples have been found in Ceylon, but, although Bates gives India as a locality, I have seen specimens from Chittagong only.

91. *Risophilus (Peliocypas) signifer* SCHM. GOEB. Faun. Col. Birm. 1846, p. 35. Fort de Kock, Gunung Singgalang.

Burma, Indo-China, Java, Sumatra.

92. *Calleida tenuis* sp. nov. (see p. 334).
 93. *Parena (Crossoglossa) testacea* CHAUD. Ann. Soc. Ent. Belg. XV. 1872, p. 178. Fort de Kock.

India and Sumatra. There are examples in the British Museum labelled "China", but this provenance requires confirmation. Until a few years ago the genus was known under CHAUDOIR's name of *Crossoglossa*, but some nine years ago Mr. T. G. SLOANE pointed out to me its identity with *Phloeodromius* W. MACL., a name published one year earlier. More recently still, after an examination of types, I was able to merge both in MOTCHULSKY's *Parena*.

94. *Endynomena (Lebia) pradierii* FAIRM. Rev. Mag. Zool. 1849, p. 34. Fort de Kock.

Uncommon, though widely distributed, in South East Asia, but not recorded from China or Japan, extending southwards to New Caledonia, and spread all through the islands of Polynesia.

95. *Lebia clarissa* sp. nov. (see p. 335).
 96. *Lebia lacerta* sp. nov. (see p. 337).
 97. *Lebia lineola* sp. nov. (see p. 338).

PENTAGONICINI.

98. *Pentagonica (Elliotia) pallipes* NIETN. Journ. As. Soc. Beng. 1856. VI, p. 525. Fort de Kock.

My records for this species include Ceylon, the Malay States, Sumbawa, Sumatra, and the Philippine Is.

99. *Pentagonica blanda* sp. nov. (see p. 339).

HELLUONINI.

100. *Creagris (Helluo) distacta* WIED. Zool. Mag. II. 1. 1823, p. 49. Fort de Kock.

Confined, so far as I am aware, to Java and Sumatra.

101. *Creagris lineola* ANDR. Ann. Mag. Nat. Hist. (9). XVIII. 1926, p. 281. Fort de Kock.

Malay Peninsula and Sumatra.

DRYPTINI.

102. *Drypta lineola* MACL. Ann. Jav. 1825, p. 27.

Fort de Kock; Padang.

Distributed in one or other of its diverse forms all over South East Asia, including Japan.

MORMOLYCINI.

103. ? *Mormolyce phyllodes* HAG. Nov. Col. Gen. 1825, fig.

Ampugadang; Serapai (Kerintji).

This species has been added for the sake of completeness, but I have not seen either of the two examples taken by Mr. JACOBSON. That found at Ampugadang is too fragile and broken to bear transport, and the second specimen is in the Leiden Museum. No other species being known with certainty from Sumatra, the identification is probably correct. Mr. JACOBSON tells me that these are the only specimens taken by him in thirteen years. Other localities are the Malay Peninsula, Siam, Java, and (doubtfully) New Guinea.

Dhanya seminigra sp. nov.

Length: 4.25 mm. Width: 1.8 mm.

Rather dark testaceous, moderately shiny; base and to some extent apex of prothorax piceous, a broad black band

across the elytra, covering a little more than half the area and leaving apex pale.

Head convex, smooth (except for a few minute punctures), frontal foveae oblong, fairly deep and containing one or two minute transverse carinae, joined by a well marked clypeal suture, behind which are a few punctures on the middle of the front; eyes rather small and not prominent, with two supraorbital pores distant from eye; clypeus rather long, bisetose; labrum slightly emarginate, 8-setose; antennae reaching beyond base of prothorax, clavate, joints $9 + 10 = 11$. *Prothorax* moderately convex, rather wider than head and quite a half wider than long, base truncate, apex emarginate, with a setiferous pore on each side, sides very finely bordered, explanate, sharply rounded in front, almost angulate at a little before middle, moderately sinuate behind, 3-setose, front angles acute and sharp, hind angles projecting laterally in the form of a small acute tooth; median line fine, front transverse impression shallow, hind one deep, the base appearing explanate, surface glabrous, fairly smooth, slightly rugose along sides and base. *Elytra* convex, somewhat compressed at sides, rather more than half as wide again as prothorax and rather less than half as long again as wide, shoulders square; striae hardly impressed, but indicated by rows of very vague punctures, a setiferous pore on interval 3 close to base, surface smooth and glabrous, very finely aciculate, at sides and apex, the latter roughly and irregularly sculptured, a row of umbilicate setiferous pores along margin. Venter sparsely punctate and pubescent at sides, more closely on apical segment.

Readily distinguished from *D. bioculata* m. by its wider form, broad black band across the elytra, and the absence of pubescence on the upper surface; the sides of the prothorax are much more strongly rounded and both front and hind angles are acute and very sharp.

West Coast, Gunung Singgalang, 1800 m., VII. 1925, 1 ex.

Var. *Pallidula* var. nov.

In this form the upper surface is almost entirely pale, but there is a vague dark cloud round the scutellum, and

there are traces of the black elytral band both at sides and behind. As the elytra are pallid, the "underlying" pores of the striae, which do not break the surface, are much more visible.

West Coast, Gunung Singgalang, 1800 m., VII. 1925, 1 ex.

Hexagonia virens sp. nov.

Length: 8.0 mm. Width: 3.25 mm.

Ferruginous, the head, prothorax, and venter darker, elytra metallic green with lateral margins and an oblong median spot, extending outwardly to stria 3, to base along interval 1, but not nearly reaching apex dark ferruginous. Surface shiny.

Head fairly wide, flat in front, strongly contracted behind, neck narrow and constricted, genae conspicuous, but only half as long as eyes, meeting neck at a right angle, clypeus bearing two large pores, its hind margin raised, so that the suture appears deep, frontal foveae moderately deep, reaching mid-eye level behind and ending on each side in a slight rounded pore, eyes prominent, extending laterally far beyond genae, antennae slender, reaching basal fifth of elytra.

Prothorax flat, subquadrate, just wider than head and about a third wider than long, extremities truncate, but the sides of the base are slightly oblique and the middle of apical margin is strongly raised above the condyliform neck, sides bisetose, somewhat explanate, very finely bordered, strongly rounded near front angles, slightly contracted to a little beyond middle, then lightly sinuate before hind angles, which are sharply rectangular, a carina on each side, at a little distance from and parallel with sides, running from just behind front angle to a point about a fifth from base, where it turns outwards, a slight furrow outside the carina and a vague ruga between it and margin; median line distinct, front transverse impression deep behind the raised margin, hind impression shallow, basal foveae small but fairly deep, just within hind angles, within the foveae a faint longitudinal impressed line, directed first inwards, then outwards, and again inwards to join the front impression, surface transversely striate. *Elytra* ovate, only moderately convex, not quite twice as wide as prothorax, two thirds longer than wide, not much

dilated behind, somewhat compressed at sides, shoulders evident; striae finely punctate, rather shallow on disk, deep at sides and apex, intervals nearly flat on disk, but very convex at sides and behind, 5 widening out close to base, 7 narrower than the other intervals on basal half, 3 with three pores, the first at a sixth, adjoining stria 3, the other two at two thirds and five sixths respectively, adjoining stria 2. Microsculpture of elytra isodiametric, prothorax and head without any. Underside smooth, the metepisterna very narrow, twice as long as wide, last ventral segment with two pores on each side (so that the specimen is presumably ♀), joint 4 of tarsi bilobed and clothed beneath with long white hairs, claws smooth.

West Coast, Tandjungadang, 1000 m, X. 1925, 1 ex.

The metallic green colour of the elytra and the unusual form of the prothorax make this species rather an abnormal one in the genus. Nevertheless, the majority of the generic characters are those of *Hexagonia*, among the species of which it may conveniently find a place, at all events until the entomological fauna of the Malay Archipelago is better known.

Caelostomus sumatrensis sp. nov.

Length: 5.0 mm. Width: 2.0 mm.

Black and shiny, very faintly iridescent; palpi, antennal joints 1 to 3 (rest brown), border of elytra and legs ferruginous.

Head convex, smooth, glabrous, frontal foveae linear, with the outer margin a little raised, curving rather sharply outwards, then slightly inwards, barely reaching mid-eye level, a small pore on vertex, eyes moderately prominent. *Prothorax* convex, sub-quadrate, quite a half wider than head, a third wider than long, extremities truncate, base a little wider than apex, very little contracted behind, sides bisetose, very finely bordered, gently rounded up to a fourth from, and then straight to base, hind angles slightly obtuse, but sharp; median line very fine, a little deeper behind, not reaching front margin, basal foveae deep, converging slightly in front and just reaching middle, surface smooth

and glabrous. *Elytra* convex, with very square shoulders and parallel sides, a third wider than prothorax, a little less than a half longer than wide; striae deep, finely crenulate, intervals moderately convex on disk, more convex at sides and near apex; surface smooth and glabrous, without appreciable microsculpture, except on head, where there is a faint reticulation of isodiametric meshes. Metepisterna and sides of venter with some punctures, protibiae with three external spines, including the apical one.

The species is a little smaller than *C. picipes* MACL., the prothorax less contracted behind, the basal foveae longer and deeper, the elytra with only the border ferruginous, the sides parallel, the striae much deeper and a little less conspicuously crenulate.

Fort de Kock, 920 m., XII. 1921, I. 1922, and 1925, 7 ex. In my collection there is also a specimen, given to me by Mr. T. G. SLOANE, and labelled "Badagei int., Sumatra's O. K., 600', 2de Sem. 89, I. Z. KANNEGIETER".

Caelostomus iridescens sp. nov.

Length: 6.0 mm. Width: 2.6 mm.

In many respects like *C. sumatrensis*, but considerably larger, the upper surface evidently iridescent, and the legs piceous; in other respects it differs as follows. Head with more prominent eyes, frontal foveae similar in shape, but subrugose. The prothorax is rather more contracted in front, so that the front angles are more rounded, the sides very slightly sinuate before base, both median line and basal foveae deeper, the former not reaching either extremity, the latter similar in shape. The elytra are more deeply striate, the crenulation, without being coarser, having the minute curves of which it is composed less closely placed. There are one or two pores at sides of prosternum; the metepisterna are smooth; the last three ventral segments are transversely sulcate and with some large pores along the sulci. The spines on the protibiae are similar; the three dilated joints of the protarsi ♂ are all inwardly produced.

Fort de Kock, 920 m., 1924, 1 ex. ♂.

Caelostomus singularis sp. nov.

Length: 6.0—7.0 mm. Width: 3.0—3.5 mm.

Black, shiny: palpi pale, antennae dark ferruginous, legs dark red to piceous.

Head convex, smooth, frontal foveae fairly deep, diverging behind, reaching mid-eye level, a depressed area between them and sides, in which is a carina, dividing the area into two furrows, clypeal suture distinctly impressed, a pore on middle of front just behind it, eyes rather flat, antennae just reaching base of prothorax, mandibles long and slender. *Prothorax* convex, about two thirds wider than head, and a third wider than long, extremities truncate, of equal width, sides very finely bordered, moderately explanate, without setiferous pores, strongly rounded from apex to base, front angles evident, though rounded, hind angles projecting laterally on each side as a sharp tooth; median line deep at middle, shallower near base, not nearly reaching apex, basal foveae deep, not reaching middle, the curve bounding them outwardly bending first a little outwards and then again inwards at the front extremity, surface smooth, some faint transverse striae on the explanate margins and adjoining the median line. *Elytra* oval, very convex, a fourth wider than prothorax and about a third longer than wide, epipleura very wide at base, tapering to a point not far from apex, sides strongly rounded behind shoulders and at apex; striae moderately deep, and evidently, though not coarsely crenulate, intervals convex, rather more so at sides, the inner ones narrow and very convex near apex, surface smooth. The microsculpture of the elytra consists in very fine, closely placed transverse lines; that of the prothorax is similar, but at base and apex there is a reticulation of wide meshes; on the head there are faint meshes a little wider than long. Underside rather uneven, metepisterna impunctate, hardly longer than wide, the segments of the venter with some impressions at sides, last three transversely sulcate and with a few punctures along the sulci. Protibiae with three external spines, including the apical one, protarsi with the first three joints slightly dilated inwardly.

West Coast, Gunung Singgalang, 1800 m., 1925, 2 ex. There is a further example in my collection, received from Mr. T. G. SLOANE, and labelled "Singgalang",

As will be seen from the above description, this species presents some unusual characters, but the buccal organs are all those of *Caelostomus*. In none of the three specimens are the three basal joints of the protarsi dilated and clothed with scales on the underside, but, whereas in Mr. JACOBSON's two specimens there are two setiferous pores on each side of the last ventral segment, in my example there is one only. It seems to follow therefore either that my specimen is quite an aberrant one, or that the protarsi in the male are undilated and naked beneath. More material is required for examination, and meanwhile I hesitate to suggest a new genus.

Lesticus jacobsoni sp. nov.

Length: 16.0 mm. Width: 6.0 mm.

Black, with here and there faint metallic reflections; prothorax dark blue-green, the green colour predominating on the lateral border; elytra purple, greenish at sides; palpi and protarsi piceous.

Head convex, smooth, and shiny; neck subconstricted, frontal foveae deep but short, not reaching mid-eye level, sides longitudinally striate, a short oblique stria just in front of neck-constriction, eyes not prominent, slightly enclosed by the genae behind, palpi slender, apical joint of both maxillaries and labials hardly dilated, quite four times as long as wide, antennae extending rather beyond base of prothorax. *Prothorax* convex, fully a third wider than head, about a fifth wider than long, base truncate, apex evidently emarginate and as wide as base, sides evenly rounded, bisetose, with only a trace of sinuation behind, the border gradually thickening from apex to just before base, front angles rounded, hind angles obtuse, slightly rounded and reflexed; median line rather fine, basal foveae moderately deep, impunctate, surface smooth, faintly rugose along basal margin. *Elytra* moderately convex, a little less than a third wider than prothorax, two thirds longer than wide, sides almost parallel, basal border extending inwards

to stria 3; striae moderately impressed and finely punctate, rather deeper at sides and apex, each of the first three arising in a pore, intervals flat on disk, somewhat convex at sides and close to apex, 3 without pores. The microsculpture of the elytra is conspicuous, with isodiametric meshes; on the head and prothorax it is extremely fine and faint, hardly showing any mesh-formation. Underside smooth, with a few pores at sides of metasternum and first ventral segment. Metepisterna about a half longer than wide. Last ventral segment (♂) with a single pore on each side. Joints 1 to 3 of metatarsi outwardly sulcate, joint 5 with setae beneath.

West Coast, Tandjunggadang, 100 m., XI. 1925, 1 ex. ♂.

I believe this to be the first species of *Lesticus* described from Sumatra, which illustrates how little the Carabid fauna of the island is known when we compare it with that of Java, which already possesses fourteen described species. *L. jacobsoni* is near the Javan *L. putzeysi* CHAUD., both of them being without pores on the third elytral interval. The size is the same, and there is a strong resemblance in both head and prothorax, but in the new species the latter is a little wider, the front angles are more rounded, and the marginal channel is shallower in front. The elytra are hardly contracted towards base, the striae are much shallower, and the intervals consequently flatter. *L. putzeysi* does occur in Sumatra as well as in Java, and specimens in the Buitenzorg Museum and in my collection were taken on the volcanic island of Krakatau.

Hyphaereon lautulus sp. nov.

Length: 7.5 mm. Width: 3.0 mm.

Black, shiny, elytra faintly iridescent: base of antennae and legs flavous; palpi, rest of antennae, explanate margin of prothorax, and apical border of elytra ferruginous.

Head convex, smooth, frontal foveae short but deep, continued on each side as a fine line to eye, clypeus longitudinally striate at sides, eyes large, prominent, antennae stout, reaching basal third of elytra. *Prothorax* moderately convex, cordate, about a third wider than head and as

much wider than long, extremities truncate, sides very finely bordered, reflexed, narrowly explanate in front, more widely behind, gently rounded in front, basal third practically straight, a pore and seta on each side at widest point, a little before middle, hind angles reflexed, obtuse, but not rounded; median line fine, transverse impressions shallow, basal foveae wide and shallow, finely punctate, surface otherwise smooth. *Elytra* convex, subovate, a third wider than prothorax, and two thirds longer than wide, shoulders conspicuous, sides nearly parallel, the margin strongly sinuate near apex; striae deep, impunctate, 6 turning inwards close to base; intervals much more convex at sides and behind than on disk, 3 with three pores, adjoining stria 2, marginal series sub-interrupted at middle, surface smooth. The microsculpture of the head and prothorax is formed by very fine, closely placed, transverse lines; on the back of the head there are some barely discernible isodiametric meshes. Underside smooth and glabrous, including prosternal process, metasternal process bordered, metepisterna much longer than wide. The four dilated joints of pro- and mesotarsi are not very wide, clothed beneath with whitish scales, joint 4 emarginate, joint 5 ciliate beneath.

Compared with *H. reflexus* MACL. from Java this species presents the following differences. Head larger and eyes more prominent, prothorax with its hind angles obtuse, the base punctate only in the foveae, elytra much more deeply striate, the border rounded, instead of angulate, at shoulder.

Fort de Kock, 290 m., 1926, 2 ex.

Perigona lata sp. nov.

Length: 4.5—5.0 mm. Width: 2.2—2.4 mm.

Black, very shiny: antennae, legs, and apical margin of venter ferruginous, palpi testaceous.

Head convex, smooth, deeply depressed at each end of clypeal suture, whence the deep frontal foveae run obliquely on each side to mid-eye level a slight depression on middle of front. *Prothorax* very convex, subcordate, a fourth wider than head and a third wider than long, without the normal

lateral setae, but with a minute seta in the hind angle and two or three similar setae in the front angle, sides very finely bordered, rounded up to a point a little before base, then sharply sinuate, the hind angles right, sharp, somewhat reflexed, and projecting a little laterally; median line and basal foveae both moderately impressed, the latter curving sharply outwards in front, surface impunctate but vaguely uneven. *Elytra* convex, shortly oval, the shoulders projecting conspicuously forwards, three fourths as wide as prothorax, about a third longer than wide; suture a little raised, so that stria 1 can be detected, one or two more striae visible under magnification, 3 dorsal pores, only visible under considerable magnification. Surface smooth, though with sparse microscopic punctures, which are to be seen also both on prothorax and head. The microsculpture of very fine, closely placed, transverse lines is just visible on the elytra, but more evident on the prothorax; on the head is a faint reticulation of isodiametric meshes. The venter is pubescent.

The colour, convexity, and great width of this species will render it fairly easy to recognize, but there are also two other very unusual features for the genus, namely the rectangular, tooth-like hind angles of the prothorax, and the absence of normal lateral setae.

West Coast, Gunung Singgalang, 1800 m., 1925, 3 ex.

Perigona parvicollis sp. nov.

Length: 3.0 mm. Width: 1.3 mm.

Black, with traces of iridescence: palpi, joints 1 and 2 of antennae, and legs flavous, rest of antennae and suture (vaguely) ferruginous.

Head convex, smooth, frontal foveae short, wide, and fairly deep, eyes rather flat, antennae stout and conspicuously moniliform. *Prothorax* convex, subquadrate, a fourth wider than head and rather more than a third wider than long, sides bisetose, with a fine reflexed border, rounded in front, basal third straight, hind angles reflexed, obtuse but sharp; median line fine, front transverse impression shallow, hind one deep, basal foveae small and poorly defined, surface

smooth, a little uneven along base. *Elytra* convex, slightly ovate, two thirds wider than prothorax, about two fifths longer than wide; the first two or three striae just traceable, 2 small but quite visible dorsal pores, one just before middle, the other not far from apex. Surface smooth, the micro-sculpture as in *P. lata*.

The species is notable for the very small relative size of the prothorax. It is about the same size as *P. nigriceps* DEJ., but quite otherwise coloured, more convex, the base of the prothorax depressed and its hind angles reflexed, the elytra relatively wider. Both mandibles and maxillae are very long, the latter in the type specimen apparently a little longer than the former.

West Coast, Gunung Singgalang, 1800 m., 1925, 1 ex. I have two further specimens in my collection, both taken in Sarawak by Mr. G. E. BRYANT, one at Kuching, 28. XI. 1913, and the other on Mt. Matang at 2000 feet, 25. I. 1914. There is another small and apparently somewhat undeveloped specimen in the Stockholm Museum labelled "Sebajak vulkan" (MJÖBERG), in which the three inner striae on the elytra are rather more clearly visible.

Perigona jacobsoni sp. nov.

Length: 4.5 mm, Width: 1.8 mm.

Black, shiny, evidently iridescent: palpi, antennae, legs, and suture of elytra (not quite reaching base) ferruginous, venter piceous.

Head convex, smooth, clypeal suture and frontal foveae both fairly deep, the latter diverging sharply behind and reaching mid-eye level, antennae stout, moniliform. *Prothorax* convex, subquadrate, a fourth wider than head, a little more than a fourth wider than long, widest at apical third, sides bisetose, with a fine reflexed border, gently rounded in front, nearly straight behind from about middle, the hind angles slightly reflexed, obtuse, though scarcely rounded; median line moderately impressed, transverse impressions obsolete, basal foveae small, rounded, and fairly deep, surface smooth. *Elytra* moderately convex, oval, a little more than a half wider than prothorax, and as much longer than wide, shoulders

evident and a little advanced; suture a little raised, stria 1 clearly visible, and a further three striae just traceable, 3 small dorsal pores at a fourth, just behind middle, and near apex. Surface smooth and shiny, the microsculpture as in *P. lata*.

The form is not unlike that of *P. nigricollis* MOTCH., but the size is much larger, the elytra are black at base, and the striae are much less evident.

West Coast, Tandjungadang, 1200 m., II. 1926, 5 ex.

Perigona erythroma sp. nov.

The specimens comprised in this species are so nearly related to those just described under the name of *P. jacobsoni*, that it will be sufficient to enumerate the differences. The size is evidently smaller, about 3.75 mm. instead of 4.5 mm., but the colour is identical, except for the fact that the shoulders are of a dark and inconspicuous reddish tint. The head and prothorax are similar, but on the former the impressions are not so deep, and the latter has wide, shallow basal foveae. The striae of the elytra are even less visible, but the dorsal pores and microsculpture are similar.

There is some little variation, the red colour of the shoulders extending vaguely in one specimen across the base of the elytra, while another example is as large as those of *P. jacobsoni*.

West Coast, Gunung Singgalang, 1200—1800 m., VI—VII. 1925, 31 ex.

Key to the Sumatran species of *Perigona*.

- 1 (12) Colour other than black, either rufous, or piceous with paler lateral and apical markings on the elytra.
- 2 (5) Colour rufous or piceous, without red elytral suture.
- 3 (4) Colour dirty red, prothorax hardly wider than long, its sides evidently sinuate behind, elytra parallel, with 3 impressed striae, length 3.5 mm.

angustata FVL.*1)

*) These two species are unknown to me in nature.

1) Rev. d'Ent. 1907, p. 104.

- 4 (3) Colour more or less piceous, usually with paler elytral markings, prothorax at least a third wider than long, its sides not sinuate behind, elytra somewhat dilated behind, striae very faint, length about 3.0 mm. *nigriceps* DEJ. ²⁾
- 5 (2) Colour more or less piceous, elytral suture bright red.
- 6 (9) Discal striae of elytra barely visible, length not exceeding 3.0 mm.
- 7 (8) Prothorax, and base and suture of elytra red, length about 3.0 mm. *plagiata* PUTZ. ³⁾
- 8 (7) Only the suture of elytra red, length 2.5 mm. *litura* PERR. ^{*1)}
- 9 (6) Discal striae of elytra shallow, but quite visible, length 3.5 mm.
- 10 (11) Sides of prothorax slightly sinuate behind, suture (narrowly) and basal fourth of elytra red. *nigricollis* MOTCH. ⁵⁾
- 11 (10) Sides of prothorax not sinuate behind, suture (widely) and base of elytra (narrowly) red. *ruficollis* MOTCH. ⁶⁾
- 12 (1) Colour black, suture (narrowly) and shoulders of elytra sometimes very dark red.
- 13 (14) Colour entirely black, lateral setae on prothorax minute, several in front angle, one in hind angle, elytra only a third longer than wide, length 4.5—5.0 mm. *lata* sp. nov.
- 14 (13) Colour black with dark red suture, prothorax with the two normal lateral setae, elytra about a half longer than wide, length not exceeding 4.5 mm.
- 15 (18) Colour black, sutural interval very dark red, elytra with 3 dorsal pores, length not less than 3.75 mm.
- 16 (17) Shoulders of elytra black, prothorax with basal foveae small, rounded and fairly deep, length 4.5 mm. *jacobsoni* sp. nov.

*) These two species are unknown to me in nature.

²⁾ Spec. Gen. v. 1831, p. 44.

³⁾ Ann. Mus. Civ. Gen. VII. 1875, p. 734.

⁴⁾ Ann. Soc. Linn. Lyon 1864, p. 72.

⁵⁾ Bull. Mosc. 1851. II, p. 506.

⁶⁾ Bull. Mosc. 1851. II, p. 506.

- 17 (16) Shoulders of elytra dark red, prothorax with basal foveae wide and shallow, length 3.75 mm.

erythroma sp. nov.

- 18 (15) Colour black, suture vaguely ferruginous, elytra with only 2 dorsal pores, length 3.0 mm.

parvicollis sp. nov.

Lorostema subnitens sp. nov.

Length: 6.5—7.0 mm. Width: 2.7—2.8 mm.

Piceous, moderately shiny: joint 1 of antennae, palpi, coxae, and side margins of prothorax and elytra more or less brown, elytra dull aeneous.

Head convex, smooth, neck faintly constricted, frontal foveae short, wide, moderately deep, eyes prominent, antennae very slender, reaching basal fourth of elytra. *Prothorax* convex, subcordate, about a third wider than head, a half wider than long, widest just before middle, base arcuate, apex rather narrower than base, bordered, sides bisetose, reflexed, almost evenly rounded, but faintly sinuate before base, hind angles strongly reflexed, obtuse but sharp; median line fine but distinct, transverse impressions slight, basal foveae wide and fairly deep, finely rugose-punctate, surface otherwise nearly smooth. *Elytra* moderately convex, slightly dilated behind, two thirds wider than prothorax, fully a half longer than wide, shoulders square, border strongly sinuate near apex, where there is a slight re-entrant angle; striae impunctate, fairly deep on disk, deeper at sides, very deep near apex; intervals strongly convex at sides and near apex, 3 with three very distinct pores, the first at a fourth, adjoining stria 3, the other two at a half and four fifths, adjoining stria 2, 7 narrowed near base, surface smooth, disk very faintly depressed behind base. Microsculpture very distinct throughout, that of the elytra with meshes twice as wide as long, that of the prothorax similar but with some isodiametric meshes, that of the head finer, the meshes all isodiametric. Underside smooth, metepisterna nearly twice as long as wide, tarsal joints bisulcate, joint 4 only lightly emarginate.

I put this species into the genus *Lorostema* with some

hesitation because both the antennal and tarsal joints are relatively shorter than in the genotype *L. alutacea* MOTCH. The general form and most of the characters are similar, but in the new species the tibiae are dark and the elytra are dull aeneous; the emargination in the elytra near apex is similar, but there is no mucro.

Fort de Kock, 920 m., 1921—1925, 8 ex. A single specimen in the Buitenzorg Museum is labelled "Wai Lima Z. Sum. Lampongs, KARNY and SIEBERS, XI—XII 1921, No. 352."

Colpodes purpurascens sp. nov.

Length: 10.0 mm. Width: 4.0 mm.

Black, shiny: head and prothorax blue-black, elytra bright purple, sometimes with vague aeneous blotches; palpi and joints 1 to 4 of antennae at base ferruginous, rest of antennae, tarsi and venter piceous.

Head convex, smooth, with a faint neck-constriction, frontal foveae short, shallow, and uneven, eyes only moderately prominent, antennae filiform, reaching basal fifth of elytra. *Prothorax* convex, cordate, about a fourth wider than head and as much wider than long, widest rather before middle, sides of base oblique, sides bisetose, moderately explanate and reflexed, rounded in front and sinuate a little before hind angles, which are slightly obtuse, but sharp and reflexed; median line and transverse impressions all rather shallow, basal foveae fairly deep, diverging forwards and melting away on each side at a point rather before middle, surface practically smooth, with a few, fine, vague punctures at sides of base. *Elytra* moderately convex, ovate, nearly twice as wide as prothorax, a little more than a half longer than wide, shoulders well marked though rounded, sides with a fine, reflexed border, slightly sinuate at basal third and again just before apex, a short mucro at apex; striae impunctate, moderately impressed, deeper at sides and near apex, a short scutellary stria present; intervals nearly flat on disk, convex at sides and near apex, 3 with three pores, the first at a fourth, adjoining stria 3, the other two at behind middle and at five sixths, adjoining stria 2, 7 evidently narrower close to base, surface smooth, vaguely depressed on disk at

a fourth from apex. Microsculpture of elytra formed by very fine, closely placed, transverse lines, prothorax with a reticulation of very wide meshes, head with isodiametric meshes. Underside smooth, metepisterna about a half longer than wide; protibiae not outwardly grooved, protarsi with joint 1 canaliculate, meso- and metatarsi with two rather shallow grooves, joint 4 of metatarsi with outer lobe longer than inner one, joint 5 glabrous beneath.

I have in my collection allied species (undescribed) from both Java and Borneo, but I know of no Eastern species with which this one can be usefully compared.

Fort de Kock, 920 m., 1924—5, 14 ex. There is also a single example, without locality label, in the Buitenzorg Museum.

Colpodes chalcociton sp. nov.

Length: 8.5 mm. Width: 2.9 mm.

Piceous, shiny: palpi and antennae ferruginous, side margins of prothorax and legs brown-red, elytra very dark bronze.

Head convex, smooth, neck lightly constricted, frontal foveae short and shallow, diverging behind, front rather uneven, genae conspicuous, long, and very oblique, eyes small, moderately prominent, antennae long, nearly reaching basal third of elytra. The maxillary palpi are incomplete, but joint 2 is somewhat flattened, curved, a slight groove on the inner margin of the upper surface. *Prothorax* convex, nearly a half wider than head, barely a fourth wider than long, widest at about middle, sides without setiferous pores, finely bordered, moderately explanate and reflexed, evenly rounded, all the angles rounded; median line distinct, transverse impressions rather shallow, basal foveae moderately deep, diverging in front and continuing to a point rather before middle, surface practically smooth, the basal foveae faintly rugose. *Elytra* convex, elongate-oval, a third wider than prothorax and nearly three fourths longer than wide, shoulders slight, border very fine, gently sinuate behind, apices separately rounded, with a re-entrant angle; striae moderately impressed and very clearly cut, with traces only

of fine crenulation, a short scutellary striae present; intervals flat, 3 without pores, surface nearly smooth, slightly depressed for a short distance along stria 3 near base, and on intervals 7 and 8 at about three fourths. Microsculpture on elytra coarse and irregular, the meshes of the reticulation on average about twice as wide as long; the prothorax smooth on disk, its margins and also the head with vague isodiametric meshes. Underside smooth, metepisterna barely a half longer than wide; protibiae not outwardly grooved, all tarsal joints shallowly bisulcate, joint 4 deeply cleft, the inner lobe in the protarsi, the outer one in the meso- and metatarsi much longer than the other one, joint 5 glabrous beneath.

The long, oval, impunctate, bronze elytra, together with the peculiar form of the head, a little reminiscent of that of *aeneipennis*, though with much less prominent eyes, should render this species fairly easy to recognize.

West Coast, Gunung Singgalang, 1800 m., 1 ex. ♀.

Dolichoctis jacobsoni sp. nov.

Length: 4.5—5.0 mm. Width: 2.1—2.3 mm.

Black, somewhat iridescent: palpi, antennae, legs, side margins of prothorax and elytra, and an apical rounded spot on each elytron, covering intervals 2 to 5, ferruginous.

Head convex, smooth, rather dull, slight linear impressions at sides of front, eyes moderately prominent, antennae extending a little beyond base of prothorax. *Prothorax* moderately convex, subcordate, a little wider than head, a half wider than long, sides of base slightly oblique, sides widely reflexed, narrowly bordered, rounded in front, nearly straight behind, with only a trace of sinuation before base, hind angles reflexed, obtuse and a little rounded, a conspicuous pore and seta on the border, just in front of them and another similarly placed at middle; median line fairly deep, transverse impressions shallow or obsolete, a slight basal fovea on each side midway between middle and hind angle, surface with a little very vague cross-striation. *Elytra* convex, oval, two thirds wider than prothorax, a third longer than wide, apical truncature only faintly indicated, the outer angle almost rounded away; striae rather fine, impunctate,

uniform, scutellary striole distinct; intervals slightly convex, 3 with two small pores on apical half, marginal series interrupted. The microsculpture of the elytra is hardly visible; on the prothorax it is formed by very fine transverse lines, which form strongly transverse meshes; on the head it is much more distinct, but irregular, the meshes on disk strongly transverse.

In form not unlike *D. rotundata* SCHM GOEB., but there is no shoulder spot on the elytra. The head and prothorax are evidently wider, the latter subcordate and more contracted behind, without deep basal depressions; apart from the absence of shoulder spot the elytra are very similar, but the microsculpture is different throughout.

Fort de Kock, 920 m., 1921—6, 7 ex., one of which was taken under rotten bark of *Erythrina lithosperma* MIQ. I cannot distinguish from the Sumatra specimens two examples in the F. M. S. Museum at Kuala Lumpur taken at light by Mr. H. M. PENDLEBURY, 20. IV. and 9. V. 1927.

Dolichotis lis sp. nov.

Length: 3.4 mm. Width: 1.75 mm.

Black: palpi, antennae, and legs (femora piceous) ferruginous; elytra with two rounded red spots on each, the shoulder spot on intervals 4 to 7, the apical spot on 3 to 6.

Head convex, smooth, shiny. frontal foveae small and shallow, eyes (for the genus) rather flat, antennae thick, extending a little beyond base of prothorax. *Prothorax* convex, a fourth wider than head and a third wider than long, sides of base somewhat oblique, sides with a very fine reflexed border, nearly straight in front, gently sinuate behind, the two parts meeting in an obtuse angle just before middle, hind angles slightly obtuse, but sharp, a conspicuous pore and seta both on it and on the median angle; median line and front transverse impression both rather shallow, hind transverse impression moderately deep, a raised rounded area within hind angles, with a depression along inner margin, surface smooth. *Elytra* convex, broad-oval, rather less than twice as wide as prothorax, about a fourth longer than wide, apical truncature without emargination, the outer

angle almost rounded away; striae very shallow, impunctate, obsolete at sides, scutellary striole obsolete; intervals sub-convex on middle of disk, flat elsewhere, 3 with three quite evident pores, close to base and apex respectively, and at about middle, marginal series interrupted, the pores large and setae very long. A very faint microsculpture of isodiametric meshes is visible on head, none elsewhere.

I have no example of the Bornean *D. parvicollis* CHAUD. for comparison, but the new species seems to be rather similar, both having a raised area within the hind angles of the prothorax, and three evident dorsal pores on the elytra; there are also well marked differences, such as the presence in the new species of two lateral pores and setae on the prothorax, the very shallow striation of the elytra, etc.

Fort de Kock, 920 m., 1924, 1 ex.

Dolichoctis quadratipennis sp. nov.

Length: 4.5—5.0 mm. Width: 2.0—2.25 mm.

Black: basal joint of antennae, legs (except middle of both femora and tibiae more or less piceous), margin of and two spots on each elytron ferruginous. The spots are small and somewhat rounded, the shoulder spot on intervals 5 to 7, the apical one on 3 and 4.

Head convex, smooth, dull, a slight depression at each end of clypeal suture, some vague rugae on vertex, eyes moderately prominent, antennae extending a little beyond base of prothorax. *Prothorax* moderately convex, cordate, slightly wider than head, and a fifth wider than long, sides with a fine reflexed border, gently rounded in front, and equally gently sinuate at some little distance from base, hind angles right, reflexed, projecting a little laterally, with a conspicuous pore and seta, none in front; median line rather fine, front transverse impression shallow, hind one deep, surface finely transversely striate. *Elytra* convex, quadrate, nearly twice as wide as prothorax, and nearly a half longer than wide, apical truncature without emargination and with much rounded outer angles; striae fine, impunctate, though with a suggestion of minute crenulation, deeper at sides, scutellary striole short; intervals flat on disk, convex at sides,

3 with one barely visible pore behind middle and bearing a small knob close to apex, marginal series interrupted. Micro-sculpture of elytra formed by very fine transverse lines; prothorax with a reticulation of barely visible, moderately transverse meshes; the meshes on the head very distinct, isodiametric.

Not unlike *D. angusticollis* BATES, but in that species the prothorax is less contracted behind, its sides ferruginous, bisetose, angled at middle, the hind angles projecting less; the elytra are very similar, though in BATES' species a little longer and more deeply striate on disk.

West Coast, Tandjunggadang, 1200 m., 1926, 1 ex.; Merang (DOHERTY, Brit. Mus.), 1 ex.

In the British Museum there are also five examples from Perak (DOHERTY), and one from Java. These show some variability in the width of the prothorax and the depth of the basal foveae. In the Javan ex. the prothorax is narrower and the elytral striae deeper.

Calleida tenuis sp. nov.

Length: 7.0—9.0 mm. Width: 2.5—3.0 mm.

Piceous: palpi, antennae, margin of prothorax, base of femora, and tarsi ferruginous; vertex with a large dull red spot; elytra bright metallic green, outer angles of apical truncature and, to some extent shoulders, cupreous-red, apical half of disk (except close to apex) green-black.

Head rather flat, smooth, frontal impressions moderately deep, short, diverging behind to eyes, genae evident, contracting rather rapidly to neck, which is subconstricted, eyes prominent, antennae reaching rather beyond base of prothorax. *Prothorax* rather flat, cordate, a little wider than head and also a little wider than long, widest before middle, base bisinuate, front angles rounded, sides narrowly bordered, moderately explanate, bisetose, rounded in front, sinuate before base, where the margin is reflexed, hind angles slightly obtuse, but sharp; median line fairly deep, deeper near base, transverse impressions slight, basal foveae long and deep, surface smooth, with some vague cross striation. *Elytra* rather flat, moderately dilated behind and widest at

apical third, twice as wide as prothorax and three fourths longer than wide, shoulders evident, apex obliquely truncate, the truncature hardly emarginate, but with a blunt tooth at outer angles; striae finely punctate, moderately impressed, sometimes shallower behind, 5 and 6 rather deeper near base, 8 with some very large pores behind shoulders; intervals flat on disk, somewhat convex at sides, 3 with two pores at about a fourth and three fourths, surface smooth, though uneven at sides, an evident depression on each side of disk behind base. *Microsculpture* formed by isodiametric meshes on head and elytra, faint on the former, very conspicuous on the latter, both faint and fine on the prothorax, the meshes moderately transverse. Underside smooth, metepisterna very long and narrow, tarsal joints grooved.

A little smaller than *C. splendidula* F. and quite otherwise coloured. The prothorax is much narrower, the elytra less deeply and more finely striate, but with a similar basal depression on each side.

Fort de Kock, 920 m., 4 ex.; Sibolangit (MjöBERG, Stockholm Mus.) 7 ex.; Tandjong Morawa, Serdang (DR. B. HAGEN, Leiden Mus.) 1 ex.; Doerian Moelan, Brindjei (R. COUGHTRIE, Brit. Mus.) 1 ex.

The species has also been captured elsewhere, as under: **Singapore** (C. J. SAUNDERS and C. F. BAKER) 4 ex.; **Pahang**, Gali, Raub (Raffles Mus.); **Borneo**, Sarawak, Quop (G. E. BRYANT, my coll.) 1 ex. and Sandakan (C. F. BAKER) 1 ex.; **Java**, Hoorn, Bat baai 1 ex., and 3 ex. without locality (Buitenzorg Mus.). In addition to the above there are in the British Museum numerous examples, without exact indication of provenance, from Penang, Perak, Java, Borneo, and Labuan.

Lebia clarissa sp. nov.

Length: 5.5—6.0 mm. Width: 2.0—2.35 mm.

Ferruginous, shiny: head, palpi, antennae (the 3 basal joints sometimes brown), knees, tibiae (median part sometimes pale), tarsi, and elytra (including epipleura) black. The elytra have each a large, round, reddish spot just before middle, and a rather smaller one at apical angle, the two

apical spots coalescing along suture, a narrow coloured strip extending along apical margin.

Head convex, a minute rounded pore at each end of clypeal suture, eyes prominent, palpi very short and slender, mentum with a wide obtuse tooth in the sinus, shorter than lobes, surface minutely punctate. *Prothorax* convex, just wider than head and about a fourth wider than long, base strongly produced at middle, the reentrant angle on each side obtuse, sides bisetose, narrowly explanate and reflexed, rounded in front, vaguely sinuate just before base, hind angles slightly obtuse, though sharp, reflexed and projecting a little laterally; median line and front transverse impression rather shallow, hind transverse impression forming a deep furrow, surface minutely punctate. *Elytra* convex, quite twice as wide as prothorax and a half longer than wide, somewhat dilated behind and widest at apical third, base emarginate, apex truncate, the outer angles of the truncature rounded; striae moderately deep, very finely crenulate, intervals moderately convex, 3 with two pores, adjoining stria 3, at a third and two thirds respectively, marginal series uninterrupted, the pores very large. Microsculpture of elytra formed by conspicuous but vaguely defined isodiametric meshes, none on head or prothorax. Venter punctate and setulose; tarsi with joint 4 bilobed, claws shortly pectinate, with four or five teeth on each side.

A little like *L. acutangula* JORD., but wider and smoother, the elytra impunctate and glabrous, the spots on them larger, reddish, the front one rounded. The pattern on the elytra is somewhat unusual and should render the species easily recognizable.

Fort de Kock, 920 m., January 1922, 1 ex.; Medan (MJÖBERG-Stockholm Mus.) 1 ex.; Tandjong Morawa, Serdang (Dr. B. HAGEN), 1 ex., Manna, 1902 (M. KNAPPERT), 1 ex., Soekadana, Lampong (J. G. VAN HASSELT), 1 ex., and a fourth specimen of doubtful origin (all Leiden Museum). A specimen has also been taken in the Malay States at Lubok Kedondong, N.W. of Mt. Ophir (H. C. ABRAHAM, F. M. S. Museums, Kuala Lumpur).

In the Medan specimen, the spots on the elytra are

flavous; they are also rather larger, and the front one is subrectangular.

Var. *bakeri* var. nov.

Two examples in my collection from Sandakan in North Borneo (C. F. BAKER) have the head red instead of black, but do not differ in other respects from the typical form.

Lebia lacerta sp. nov.

Length: 6.0 mm. Width 2.75 mm.

Flavous: head, prothorax, apical joints of antennae, and tarsi ferruginous, a black pattern on the elytra. In the pattern intervals 1 and 2 are black to near apex, 3 and 4 for a short distance near base, the black colour extending further back on 4 than on 3; at two thirds there are again two short patches on 3 and 4, the latter a little behind the former, from which a short oblique line runs forward on each side to a small rounded spot, just behind middle, on intervals 5 and 6.

Head convex and practically smooth, a minute pore at each end of clypeal suture, middle of front vaguely uneven, eyes prominent, palpi rather slender, mentum with a sharp tooth in the sinus, shorter than the lobes. *Prothorax* moderately convex, just wider than head and fully a half wider than long, hardly contracted behind, base moderately produced at middle, the re-entrant angle on each side about right, but not sharp, sides bisetose, the front pore distant from margin, the hind one on the angle, conspicuously explanate and reflexed, the explanate margin increasing in width from apex to base, strongly rounded on front half, then straight to hind angles, which are a little obtuse, reflexed, and just project laterally; median line and front transverse impression very faint, hind transverse impression deep, surface transversely subrugose. *Elytra* moderately convex, subovate, rather more than twice as wide as prothorax and a little less than a half longer than wide, widest at apical third, base emarginate, apex truncate, the truncature lightly emarginate on each side, with the outer angle rounded; striae deep, with only vague indications of crenulation; intervals

strongly convex, 3 with two inconspicuous pores, adjoining stria 3, at about a third and two thirds respectively, marginal series uninterrupted, the pores of moderate size. Microsculpture of elytra formed by slightly transverse meshes; that of the prothorax irregular, the meshes nearly isodiametric; head with isodiametric meshes. Venter setulose; tarsi with joint 4 bilobed, claws with four or five rather slender teeth on each side.

Nearly allied to *L. calycophora* SCHM. GOEB., but with a much narrower, subrugose prothorax, the elytra longer, the striae without conspicuous underlying pores, and the pattern, though on the same plan, much more developed.

West Coast, Gunung Singgalang, 1800 m., July 1925, 1 ex., ♀.

Lcbia lineola sp. nov.

Length: 5.5 mm. Width: 2.4 mm.

Ferruginous: head and prothorax dark rufous, the former with a large round pale spot on vertex; legs and elytra flavous, the latter with three black lines, none of them quite reaching apex, one on each side, covering intervals 7 and 8, and a sutural one, covering intervals 1 and 2, with a short break on 2 at a third from base.

Head convex and smooth, though microscopically punctate, a minute pore at each end of clypeal suture, middle of front with two shallow foveae, eyes very large and prominent, palpi very small and slender. *Prothorax* convex, almost semi-circular, though flattened at apex, a little wider than head and twice as wide as long, base only moderately produced at middle, with a rounded re-entrant angle on each side, sides bisetose, conspicuously explanate, the explanate margin increasing in width from apex to base, hardly reflexed in front, hind angles moderately reflexed and slightly obtuse; median line very fine, front transverse impression shallow, hind one deep, surface with some shallow, irregular striation. *Elytra* moderately convex, subovate, two thirds wider than prothorax, a little less than a half longer than wide, widest rather behind middle, base emarginate, apex truncate, the truncature lightly emarginate on each side, with an obtuse,

slightly rounded, outer angle; striae deep, impunctate, but with underlying transverse punctures, clearly visible near base; intervals strongly convex, 3 with two inconspicuous pores adjoining stria 3, at about a fourth and three fourths. Microsculpture of the elytra distinct, the meshes on the whole slightly transverse; that of the prothorax similar, but more irregular; the meshes on head isodiametric. Venter setulose; tarsi with joint 4 moderately bilobed, claws with 4 stout pectinations on each side. The inner margin of the mesotibiae ♂ has a double nick near apex.

The pattern on the elytra is a very unusual one for the genus, so that the species should be easily recognized.

West Coast, Padang Aarap, 700 m., 1926, 1 ex. ♂.

Pentagonica blanda sp. nov.

Length: 4.5 mm. Width: 2.1 mm.

Black: joint 1 of antennae mainly piceous; palpi, rest of antennae, and legs ferruginous.

Head rather flat, smooth, frontal impressions small and shallow, genae forming behind, apart from the neck, a continuous curve with the back of the large and prominent eyes, and extending very little behind them, antennae rather thick, reaching basal fifth of elytra. *Prothorax* moderately convex, a fifth wider than head, and practically twice as wide as long, base slightly produced at middle, but otherwise forming with the posterior half of sides a gentle continuous curve, apex a little emarginate and, like the sides, finely bordered, front angles rounded away, sides slightly explanate and moderately reflexed, angulate at middle, at which point there is a conspicuous pore and seta; median line fine, surface smooth. *Elytra* rather flat, broad-oval, fully three fourths wider than prothorax, about a third longer than wide, widest at or only just behind middle, apical truncature not emarginate at sides, the outer angles rounded; striae very lightly impressed and finely punctate, hardly evanescent either at sides or behind; intervals nearly flat, 3 with three minute pores, the first at a fifth, adjoining stria 3, the second and third at a half and three fourths respectively, adjoining stria 2, marginal channel deep, the series of pores subinterrupted. Micro-

sculpture very distinct, the elytra with, on the whole, slightly transverse meshes; those on the prothorax a little wider, but very fine and strongly transverse on front of disk; the meshes on the head isodiametric.

Nearly allied to *P. batesi* ANDR., but in that species the antennae are dark and the prothorax red; further the prothorax is narrower, the elytra longer, more deeply striate and bordered with red.

Fort de Kock, 920 m., 1922—1926, 3 ex., "under rotten bark of *Erythrina lithosperma* MIQ." Other localities are: **Java**: Enkhuizen, Bat. baai, 1 ex., and Doerian, Riouw-Arch. (DAMMERMAN), 1 ex., both in the Buitenzorg Museum. **Borneo**: Mt. Matang, W. Sarawak, 1 ex., (G. E. BRYANT, my coll.). **Malay Peninsula**: Perak (DOHERTY), 1 ex. in the British Museum; Selangor, Kuala Lumpur, "Straits creeper", 1 ex. (H. M. PENDLEBURY), and Lubok Kedondong, N. W. of Mt. Ophir, 2 ex. (H. C. ABRAHAM). both in the F. M. S. Museum, Kuala Lumpur; Singapore (RAFFRAY, my coll.), 2 ex. The specimens from Java and the Malay States are rather more deeply striate than those from Sumatra and Borneo.
